

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P1538PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/JP2004/017121	International filing date (day/month/year) 11/11/2004	(Earliest) Priority Date (day/month/year) 12/11/2003
Applicant MATSUSHITA ELECTRIC WORKS, LTD.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 4c

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☒ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/017121

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L33/00 H01L21/308

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 410 348 B1 (CHEN TZER-PERNG ET AL) 25 June 2002 (2002-06-25) column 4, lines 7-47; figures 5a-5c	1,3,9
A	EP 1 271 665 A (KABUSHIKI KAISHA TOSHIBA) 2 January 2003 (2003-01-02) paragraphs '0048!, '0049!; figures 9a-9c	1,3
A	US 5 779 924 A (KRAMES ET AL) 14 July 1998 (1998-07-14) column 7, lines 11-39; figures 7a-7c	1,3
A	EP 1 324 399 A (KABUSHIKI KAISHA TOSHIBA) 2 July 2003 (2003-07-02) paragraphs '0013! - '0015!; figures 2A-2E	1,3
A	US 2003/075723 A1 (HEREMANS PAUL ET AL) 24 April 2003 (2003-04-24) paragraph '1766!; figure 28	8,9



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

20 October 2005

Date of mailing of the international search report

28/10/2005

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/017121

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6410348	B1	25-06-2002	TW	445507 B	11-07-2001
EP 1271665	A	02-01-2003	CN	1395321 A	05-02-2003
			CN	1652367 A	10-08-2005
			TW	564584 B	01-12-2003
			US	2002195609 A1	26-12-2002
US 5779924	A	14-07-1998	DE	19709228 A1	25-09-1997
			GB	2311413 A	24-09-1997
			JP	10004209 A	06-01-1998
			SG	54385 A1	16-11-1998
EP 1324399	A	02-07-2003	CN	1430290 A	16-07-2003
			TW	576864 B	21-02-2004
			US	2003173568 A1	18-09-2003
US 2003075723	A1	24-04-2003	US	6504180 B1	07-01-2003